

THE INTERNATIONAL OCEAN CARBON COORDINATION PROJECT (IOCCP)

A joint project of SCOR and IOC and an affiliate program of the Global Carbon Project.

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Carbon and Tracer News from the CLIVAR Southern Ocean Panel Meeting

The CLIVAR/Clic Southern Ocean panel met in Bremerhaven Germany September 8-11, 2003 for their annual Panel meeting. Panel member Chris Sabine gave a presentation on the ocean carbon activities that focused on the establishment of the IOCCP and the hope that the carbon and CLIVAR communities can work together to develop and coordinate an observational program that will meet the needs of both communities. He presented a summary of the repeat sections that was compiled at the January IOCCPb meeting. Four action items were noted:

Need to more strongly promote the reporting of future cruise plans to Maria Hood and Katy Hill as soon as possible along with possibility/desire to include other tracers such as carbon.

Talk with Nicolas Metzl about the possibility of doing full depth hydrography along the OISO line in southern Indian Ocean. The panel recognized the time constraints on the ship time, but is hoping to promote a one-time survey with hydrography, tracers and carbon to fill in valuable full water column measurements in this poorly studied region.

The panel wanted to promote the idea of an onshore transect west of the Ross Sea from the US S4 line scheduled to extend from P16S to I9S.

The panel encouraged the development of a Southern Ocean Gas Exchange study modeled after the previous GASEX studies in the North Atlantic and tropical Pacific.

Further reading: IOCCP Southern Ocean Report - Chris Sabine (Word, 24Kb); Presentations made at the CLIVAR / Clic Southern Ocean Panel Meeting (http://www.clivar.org/organization/southern/so2_talks.html)

CLIVAR Carbon Representatives Named

Following the recommendations of CLIVAR SSG 12 (see IOCCP newsletter No. 1) the IOCCP was asked to provide names of representatives to serve on the CLIVAR Basin Panels to increase coordination on repeat hydrography sections. The tentative list includes: Chris Sabine (Southern Ocean Panel), Arne Koertzinger (Atlantic Basin Panel), Dick Feely / Kitack Lee (Pacific Ocean Panel), and Bronte Tilbrook (Indian Ocean Panel, under development). The IOCCP secretariat will work closely with the representatives to solicit input from the community on issues needing closer coordination in each basin and will communicate the meeting results via the newsletter and web site.

Further reading:

Ocean carbon experts to be added to CLIVAR Basin Panels - in August 2003 News.

A26.5 Line May Reoccupy 24N

Discussions are underway for the 26.5 N line to reoccupy the 24.5 N section sampled as part of the OACES project in 1998. Chief Scientist Stuart Cunningham (Southampton) says that his intention for the cruise is to occupy the boundary currents near the latitude of 26.5 N, but to join the 24.5N section for the majority of the transatlantic section, which would match the 1998 survey. Carbon measurements for this line will be carried out by Ute Schuster at University of East Anglia, UK.

Further reading:

For more information on 1998 line and proposed cruise track, see "An OACES Section along 24N in the Atlantic Ocean Trans-Atlantic Line - January 8 to February 24, 1998".

SOLAS Working Group 3 Holds First Meeting

The first meeting of the SOLAS Implementation Group 3 on "Air-sea flux of CO₂ and other radiatively active gases" was held in Bergen Norway, 3-5 November. This meeting was co-sponsored by the IOCCP. The SOLAS science plan and implementation strategy identify a set of goals for SOLAS to achieve, and the objective of this meeting was to create an implementation plan that will detail how these goals could be met. Focus 3 of SOLAS includes the following activities: 1. Geographic and sub-decadal variability of air-sea CO₂ fluxes; 2. Surface layer carbon transformations in the oceans: sensitivity to global change; and 3. Air-sea flux of N₂O and CH₄. The implementation plan developed at the meeting will be published soon on the SOLAS web site. Participants at this first meeting included: Truls Johannessen (Chair, Univ. Bergen), Arne Koertzinger (IfM, Kiel), Alex Kozyr (CDIAC, USA), Kitack Lee (Pohang University), Corinne LeQuéré (Max Planck Institut fur Biogeochemie, Jena), Wajih Naqvi (NIO, Goa), Ulf Riebesell (IfM, Kiel), Britt Stephens (NCAR, Boulder), Yukihiro Nojiri (NIES, Japan), Casey Ryan (SOLAS IPO), and Maria Hood (IOCCP).

Further reading:

The SOLAS science plan and implementation strategy is available on the SOLAS Web site (<http://www.uea.ac.uk/env/solas/>).

Methods Handbook Scheduled for Early 2004 Publication

The Pacific Marine Science Organization (PICES) Working Group 17 on Biogeochemical data integration and synthesis and the SCOR-IOC Advisory Panel on Ocean CO₂ will be publishing a

revised version of the Handbook of Methods for the Analysis of Various Parameters of the Carbon Dioxide System in Seawater. This updated version, being edited by Andrew Dickson, will include new sections on data reporting, and has the tentative title: "The Guide of Best Practices for Oceanic CO₂ Measurements and Data Reporting". This new section on data reporting will discuss any new agreements that may be made at the January Tsukuba workshop. After publication, the CO₂ Panel and other interested partner organizations will discuss the possibility of hosting a series of training workshops using the new handbook.

Further reading:

Please visit the Methods section of the IOCCP Web site for links to Methods, Guides, and Data Tools. (<http://ioc.unesco.org/ioccp/methods.htm>)

New Southern Ocean "OISO" Data Available

Nicolas Metzl has delivered three new data sets to CDIAC from the Océan Indien Service d'Observation (OISO) programme in the Southern Ocean. These data cover 3 cruises from OISO-1 (January 1998), OISO-2 (August 1998), and OISO-3 (December 1998). IOCCP would like to encourage the announcement of new data set releases. Please send information to Maria Hood (m.hood@unesco.org) for publication in the news bulletin.

Further reading:

Please visit the CDIAC Ocean CO₂ data site (<http://cdiac.esd.ornl.gov/oceans/home.html>)

New Software to Calculate CO₂ Parameters for Mac and Unix

As part of the European Commission 5th Framework Eurotroph Project, Jean-Pierre Gattuso and Aurélien Proye from the Laboratoire d'Océanographie de Villefranche have developed a new (free) software package for Mac, Unix, and Linux platforms to calculate various parameters of the carbonate system in seawater.

Further reading:

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